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## **CLAIMS**

- 1. Use of an enzyme treated fish protein hydrolysate (FPH) material for the preparation of a pharmaceutical or nutritional preparation for the treatment and/or prevention of fatty liver in an animal.
- 2. Use of the FPH material for the preparation of a pharmaceutical or nutritional composition for the treatment and/or prevention of hypercholesterolemia in an animal.
- 3. Use of the FPH material for the preparation of a pharmaceutical or nutritional composition for the treatment and/or prevention of hyperhomocysteinemia in an animal.
- 4. Process for the production of an enzyme treated fish protein hydrolysate (FPH), characterized in that the process comprises the following steps:
  - a) fish flesh remnants are hydrolyzed with a protease enzyme at a pH in the range of 5,0-8,0, preferable 6,0-7,0, most preferable at about 6,5, and at a temperature in the range of 40 70°C, more preferable 50 60°C, and most preferable at about 65°C,
  - b) the temperature is elevated to about 90 99 °C
  - c) an insoluble fraction was removed by decanting and filtering, and the remaining mixture was separated in a three phase separator into an oil fraction, an emulsion fraction and an aqueous fraction, and
  - d) the aqueous fraction was isolated, and thereafter filtered through a ultramembrane with a nominal molecular weight limit of 100 000, and thereafter spray-dryed.
- 5. Process in accordance with claim 4, wherein the PFH material contains proteins in the range 70-90%, preferable 80-85%, and most preferable about 83%.
- Process in accordance with claim 4, wherein the amino acid content of the PFH material is as given in table 2.

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- 7. Use of an enzyme treated fish protein hydrolysate (FPH) material prepared by the process according to claims 4-6 for the preparation of a pharmaceutical or nutritional preparation for the treatment and/or prevention of atherosclerosis, coronary heart disease, stenosis, thrombosis, myocardial infraction and stroke in an animal.
- 8. Use of the FPH material in accordance with claims 1-3 and 7, wherein said animal is a human.
- 9. Use of the FPH material in accordance with claims 1-3 and 7, wherein said animal is an agricultural animal, such as gallinaceous birds, bovine, ovine, caprine or porcine mammals.
- 10. Use of the FPH material in accordance with claims 1-3 and 7, wherein said animal is a domestic or pet animal, such as dog or cat.
- 11. Use of the FPH material in accordance with claims 1-3 and 7, wherein said animal is a fish or shellfish, such as salmon, cod, Tilapia, clams, oysters, lobster or crabs.
- 12. Process in accordance with claim 4, wherein the fish material is fish flesh remnants on salmon bone frames after filleting.
- 13. Process in accordance with claim 4, wherein the hydrolysis is conducted by the enzyme material is a Bacillus protease complex (Protamex<sup>TM</sup>).
- 14. Process in accordance with claim 4, wherein the enzymatic hydrolysis is performed at a pH in the range of 5,0-8,0, preferable 6,0-7,0, most preferable at about 6,5.

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- 15. Process in accordance with claim 4, wherein the enzymatic hydrolysis is performed at a temperature in the range of 40 70°C, more preferable 50 60°C, and most preferable at about 65°C.
- 16. Use in accordance with claims 1-3 and 7-11, wherein the composition is a food grade product or additive, e.g. an animal feed or pet food.

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